

Method and Apparatus for Etch Endpoint Detection

ABSTRACT OF THE DISCLOSURE

Broadly speaking, an invention is provided for monitoring a plasma optical
5 emission. More specifically, the present invention provides a method for monitoring the
plasma optical emission through a variable aperture to detect an endpoint of a plasma
etching process without interferences that could lead to false endpoint calls. The method
includes collecting optical emission data from a plasma through an aperture defined by
moveable members. The moveable members are capable of varying a configuration of the
10 aperture. The method also includes holding the moveable members at a particular time to
cause the aperture to maintain a fixed configuration. The method further includes detecting
a specific perturbation in the plasma optical emission while holding the moveable
members.